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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/509,539

09/28/2004

Shigeyoshi Fujiwara

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EXAMINER

BARHAM, BETHANY P

ART UNIT

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1615

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/509,539	Applicant(s) FUJIWARA ET AL.	
	Examiner Bethany Barham	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,9-11 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,9-11 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Summary

Receipt of Applicant's Response and Claim Amendments filed on 01/24/08 is acknowledged. Claims 1-2, 4-5, 9-12, and 15-18 are pending. Claims 1-2, 4-5, 9-12, and 15-18 are rejected.

Due to Applicant's Claim Amendments the objections, 112 rejections, and 102 rejections of record are hereby **withdrawn**. All other rejections of record are hereby **maintained**.

MAINTAINED REJECTIONS

DOUBLE PATENTING

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2 and 4-6 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 5-6 and 9-11 of copending Application No. 10/471,087. Although the conflicting claims are not identical, they are not patentably distinct from each other because both claim a barium sulfate powder that can be doped with Zn, Li or Na.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

NEW REJECTIONS

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-5, 9-11 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 05058624 A.

- '624 teaches the preparation of barium sulfate powder wherein the process for producing the powder starts with a) a barium ion such as barium compounds; b) in the presence of one or more metallic ion such as sodium ions. Note the sodium ions contain sulfate ions (see the enclosed abstract).

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- '624 teaches that the powder has a size of 4-20 microns (abstract).
- '624 teaches that the pigment is for use in cosmetics (abstract). It is the examiners opinion that the powder provides a barrier to the skin and prevents a roughening of the skin since it is the same powder and is described as being used in cosmetics.

Claims 1 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,632,276 ('276).

- '276 teaches the preparation of barium sulfate with a size of less than 200 microns, preferably less than 50 microns, with an aspect ratio of more than 3, and in particular more than 5 (col. 2, lines 21-35).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06-009359 ('359) in view of JP 11-130652 ('652).

The limitations of claims 1 and 9-11 are taught:

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- '359 teaches fine particles used in the field of cosmetics or skin external preparations such as silica, titanium dioxide, talc and barium sulfate, and that these particles can be used independently, or together as two or more [0008] and that the F-potential of the fine particles was (-) [0032] and teaches including them in an amount of 0.01-95% [0024].
- '359 does not teach the size of the particles.
- '652 teaches that a skin cosmetic containing clay minerals having a $>30\text{mV}$ absolute value of zeta potential and a particle diameter of 1-5000nm is capable of having excellent skin protecting effects and improving effects on chapped skin and moisture retaining ability (abstract and claim 1). '652 teaches that these clay materials are effective in providing a skin barrier [0010-0011]. '652 teaches that numerous clay minerals are blended in the skin cosmetic smectite, bentonite, montmorillonite, beidellite, nontronite, saponite, etc [0016]. The clay is present in an amount of 0.1 to 10% by weight [0021].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine '359 and '652, since both teach cosmetics comprising mineral pigments. '359 teaches clay, barium sulfate and pearl pigments are capable of being used for a smooth powder or emulsion, while '652 teaches various mineral including clay. One of ordinary skill in the art would look to '652 which teaches that various clays and minerals are known to impart skin protecting effects and improving effects as well as a skin barrier in a size of 1-5000 nm, in order to make the composition of '359 with barium sulfate, with a reasonable expectation of success. One of ordinary skill in the art

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would know how to optimize the ranges of '359 and '652, as the MPEP 2144.05 states "Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.

Claims 1 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,416,573 B2 ('573).

The limitations of claims 1 and 9-11 are taught:

- '573 teaches a powder, which augments the hiding of troubled morphology of the skin and troubled skin tone and has a good feel (smoothness) when used in cosmetics (col. 4, lines 27-42). '573 teaches that the composite pigment of the powder can be a clay mineral, barium sulfate, or pearl pigments of a particle size of 0.2-50 microns (col. 9, lines 20-51). '573 teaches that the structure of the pigment can be tabular with a flat surface (col. 9, lines 52-53). '573 teaches including other ingredients besides the composite pigment, such as talc, kaolin, mica, barium sulfate, etc. (col. 17, lines 35-67).
- '573 teaches that the powders or composite pigments at a usage range of 1-100% by weight and are further present in the amount of 1-30% by weight in emulsification cosmetics and 1-80% by weight in solid powder cosmetics (col. 8, lines 33-44).
- It is the examiners opinion that the powder provides a barrier to the skin and prevents a roughening of the skin since it is described as hiding skin morphology and providing smoothness.

Claims 2, 4, 12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over CA 2,374,539 A1 ('539).

The limitations of claims 2, 4, 12, and 15 are taught:

- '539 teaches an anti-corrosive agent comprising a conductivity pigment such as doped barium sulfate of 0.0005 to 5 microns in diameter in the amount of 1-30% by weight (claims 1, 5-7), the barium sulfate being doped with tin or antimony (pg. 12, lines 43-44).

Claims 2, 4, 12, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloom et al (*J. Chem. Soc. A*, 1971, 833 – 836).

- Bloom et al teaches barium sulfate being doped with alkali metal salts, such as sodium (abstract, pg. 834, column 1, top).
- Bloom et al does not teach a size in microns or aspect ratio but teaches they were 0.5-3 Mrad.
- '539 is taught above and teaches a doped barium sulfate of 0.0005 to 5 microns in diameter in the amount of 1-30% by weight (claims 1, 5-7 and pg. 12, lines 43-44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to size the doped Barium Sulfate particles of Bloom et al to be similar to that of '539. Both articles teach forming doped barium sulfate particles. One of ordinary skill in the art would know how to optimize the ranges of Bloom et al and '539, as the MPEP

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2144.05 states "Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation."

Claims 1-2, 4-5, 9-11 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 05058624 A.

- '624 is taught above and teaches doped barium sulfate powder with a size of 4-20 microns for use in cosmetics (abstract). It is the examiners opinion that the powder provides a barrier to the skin and prevents a roughening of the skin since it is the same powder and is described as being used in cosmetics (as instant claimed in claim 9-11 and 15-17).
- '624 does not teach aspect ratio of the particles.
- '276 teaches the preparation of barium sulfate with a size of less than 200 microns, preferably less than 50 microns, with an aspect ratio of more than 3, and in particular more than 5 (col. 2, lines 21-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to measure the aspect ratio of a particle of barium sulfate of substantially the same size ('624) as taught by '276. '276 teaches that a barium sulfate particle with a size overlapping with '624 has an aspect ratio of more than 3 is known. A skilled artisan would know how to optimize the aspect ratio of '624 and '276, as the MPEP 2144.05 states "Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation."

MAINTAINED REJECTIONS

Claims 1 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,416,573 B2 ('573) in view of JP 11-130652 ('652).

The limitations of claims 1 and 9-11 are taught:

- '573 is taught above.
- '573 does not specifically state "skin barrier function" or "skin roughening preventing and improving powder".
- '652 teaches that a skin cosmetic containing clay minerals having a $>30\text{mV}$ absolute value of zeta potential and a particle diameter of 1-5000nm is capable of having excellent skin protecting effects and improving effects on chapped skin and moisture retaining ability (abstract and claim 1). '652 teaches that these clay materials are effective in providing a skin barrier [0010-0011]. '652 teaches that numerous clay minerals are blended in the skin cosmetic smectite, bentonite, montmorillonite, beidellite, nontronite, saponite, etc [0016]. The clay is present in an amount of 0.1 to 10% by weight [0021].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine '573 and '652, since both teach cosmetics comprising mineral pigments. '573 teaches clay, barium sulfate and pearl pigments are capable of being used for a smooth powder or emulsion, while '652 teaches various mineral including clay. One of ordinary skill in the art would look to '652 which teaches that various clays and minerals are known to impart skin protecting effects and improving effects as well

as a skin barrier, in order to make the composition of '573 with barium sulfate, with a reasonable expectation of success.

Response to Arguments

Applicant's arguments with respect to claims 1-2, 4-5, 9-11 and 15-18 have been considered but are moot in view of the new grounds of rejection necessitated by applicants' amendments.

Applicant's argue that the double patenting rejection is improper since instant claim 1 has been amended to include a specific particle size and aspect ratio, however, the composition of the particle is the same as claimed in the co-pending application and therefore overlaps with the instant claim 1.

Applicant's also argue that the rejection of '652 in view of '573 is improper, because the art is silent with respect to the aspect ratio. The examiner respectfully disagrees, the prior art teaches a composition and process for forming said composition described by applicants instant application, but applicants observation that it also has 'aspect ratio of 3-250' does not give it patentable weight, since it is the same composition and same process of making, as adding a characterization to a prior art patented invention is not patentable. Absent a showing of unexpected results by Applicant that the particles have different aspect ratios, the rejection stands. The Office is not equipped to test the instant claims against the prior art, and as such the burden falls to Applicant to produce a side-by-side comparison, measurement, statistical data,

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showing that the particles formed result in divergent aspect ratios from the instant claimed particles.

Applicant is claiming a physical property of the compound of the same composition and size as taught in the art. MPEP 716.02 states "Evidence of unobvious or unexpected advantageous properties, such as superiority in a property the claimed compound shares with the prior art, can rebut *prima facie* obviousness. "Evidence that a compound is unexpectedly superior in one of a spectrum of common properties . . . can be enough to rebut a *prima facie* case of obviousness." No set number of examples of superiority is required. *In re Chupp*, 816 F.2d 643, 646, 2 USPQ2d 1437, 1439 (Fed. Cir. 1987)". Applicant must provide such evidence.

Conclusions

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bethany Barham whose telephone number is (571)-272-6175. The examiner can normally be reached on Monday to Friday; 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Bethany Barham
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/Michael P Woodward/

Supervisory Patent Examiner, Art

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